the central zone of the posterior surface having a chord diameter and a radius of curvature;

the chord diameter being preferrably larger than the largest measurable chord diameter of the pupil of the eye of the patient but which is equal to or less than the maximum measured central spherical radius of curvature of the cornea of the patient;

the radius of curvature of the posterior central zone being such that the sag depth difference between the measured greatest central spherical radius of curvature of the cornea and that of the posterior central zone of the lens is in the range of from 0–15 microns;

the central zone of the anterior surface having a radius of curvature which, in conjunction with the posterior surface of the central zone, provides the proper power factor to provide the patient with substantially normal distance vision;

the intermediate annular zone of the posterior surface being aspheric with a curvature that increases continuously from its least value adjacent the central zone to its maximum value adjacent the peripheral zone, said curvature adjacent the posterior peripheral zone being greater than the corresponding zone of the cornea, said posterior intermediate zone controlling the change of shape of the cornea; and

the peripheral annular zone having a spherical radius of curvature to provide limbal clearance.

2. The corneal contact lens of claim 1 in which one of the zones defining the optically effective portion of the lens is provided with a central region and a paracentral region and in which the spherical radius of curvature of the central region of said one zone in conjunction with that of the other central zone provides the proper power factor for normal distance vision.

3. The corneal contact lens of claim 2 in which the chord diameter of the central region is approximately three-fourths of the chord diameter of the pupil when measured under dim light conditions but is limited to a range between 3.0 and 6.0 mm.

4. The corneal contact lens of claim 3 in which the spherical radius of curvature of the paracentral region of said one zone, in conjunction with the radius of curvature of the other central zone, provides the proper power factor to correct the patient's near vision to substantially normal.

5. The corneal contact lens of claim 4 in which the central zone having the central region and the paracentral region is on the anterior surface of the lens.

6. The corneal contact lens of claim 4 in which the central zone having the central region and the paracentral region is on the posterior surface of the lens, and which central region has a sag depth difference ranging from 0–15 microns.

7. The corneal contact lens of claim 6 in which the radius of curvature r of the paracentral region satisfies the equation

$$F = \frac{n' - n}{r}$$

to provide the proper near vision for the patient where, F is the surface power in diopters, n' is the index of refraction of the lens material, and n is the index of refraction of tears.

8. The corneal contact lens of claim 3 in which the paracentral region of said one zone is aspheric, the curvature of said paracentral region increasing continuously from its boundary with the central region to its boundary with the intermediate zone, the curvature of the paracentral region, in conjunction with that of the central zone of the other surface, providing the patient with corrected vision from near to distant and for all distances between.

9. The corneal contact lens of claim 8 in which the central zone having the central region and the paracentral region is on the posterior surface of the lens, and which central region has a sag depth difference ranging from 0–15 microns.

10. The corneal contact lens of claim 9 in which the radious of courvature r of the outer edge of the paracentral region is calculated using the formula

$$F = \frac{n' - n}{r}$$

and the inner edge has substantially the same radius of curvature as the central region where, F is the surface power in diopters, n' is the index of refraction, and n is the index of refraction of tears.

11. The corneal contact lens of claim 9 in which the radius of curvature of the parcentral region is an enlarged curve extending between the inner edge of the paracentral region and the outer edge of the intermediate zone.

12. The corneal contact lens of claim 1 in which a wafer made from a material having a differing index of refraction from that of the lens body is positioned in the optically effective portion of the lens, the optical characteristics of the wafer, in conjunction with the spherical radii of curvature of the anterior and posterior central zones, providing the proper power factor to correct the vision of the patient.

13. The corneal contact lens of claim 12 in which the index of refraction of the wafer is greater than that of the lens body.

14. The corneal contact lens of claim 13 in which the wafer, in conjunction with the radius of curvature of the posterior and anterior zones of the lens, provides the proper power factor to provide the patient with substantially normal near vision, the spherical radii of curvature of the posterior and anterior central zones of the lens provide the proper optical power for substantially normal distance vision.

15. The corneal contact lens of claim 14 in which the chord diameter of the wafer is preferrably smaller than the chord diameter of the pupil of the patient under normal reading illumination, but is limited to a range substantially between 2.5 mm and 3.5 mm.

16. The corneal contact lens of claim 15 in which the wafer is positioned so that it is substantially located in the center of the posterior and anterior central zones of the lens.

17. The corneal contact lens of claim 16 in which the weight of the lens is such that the patient will see through the portions of the anterior and posterior central zones of the lens when the patient is looking directly ahead which provide normal distance vision.

18. The corneal contact lens of claim 9 in which the peripheral zone of the posterior surface of the lens is provided with a pair of spherical surfaces.

19. The corneal contact lens of claim 18 in which the radius of curvature of the outer spherical surface of the two surfaces of the peripheral zone is the greater.

20. The corneal contact lens of claim 1 in which the curvature of the posterior intermediate zone adjacent the posterior peripheral zone is substantially in the range of from 0.10 mm to 0.20 mm. greater than that of the corresponding part of the cornea.

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